

**Distribution, redescription and description of new species of the  
*Clavilispinus exiguus* group (Coleoptera: Staphylinidae, Osoriinae)  
in the Neotropical region\***

by

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**Abstract**

Within the collections of the Natural History Museum of the University of Kansas three new Neotropical species of the genus *Clavilispinus* (Staphylinidae: Osoriinae) were found. *C. rufescens* was found as distinct species. A key is given for the related species: *C. exiguus*, *C. minutus*, *C. rufescens*, *C. politus* and the new species *C. junkii*, *C. cephalotes* and *C. distinguendus*. The distribution of these species in the Neotropical region is described.

Keywords: **New species, Neotropics, Staphylinidae, Osoriinae, *Clavilispinus*.**

**Resumo**

Na coleção do Museu de Historia Natural da Universidade de Kansas três espécies novas do gênero Neotropical *Clavilispinus* (Staphylinidae: Osoriinae) foram encontradas. *C. rufescens* foi considerada uma espécie distinta. Uma chave de identificação é apresentada para as espécies aparentadas: *C. exiguus*, *C. minutus*, *C. rufescens*, *C. politus* e para as novas espécies *C. junkii*, *C. cephalotes* e *C. distinguendus*. É descrita a distribuição destas espécies na região Neotropical.

**Introduction**

Within the extensive collections of Osoriinae of the Snow Entomological Collections of the Natural History Museum of the University of Kansas, I found three *Clavilispinus* species related to *Clavilispinus exiguus*, which differ from that species significantly in colour and microsculpture. Although *Clavilispinus* species are mostly parthenogenic and thus show a high variability, these specimens must be regarded as new species. To confirm their placement within the species group related to *Clavilispinus exiguus* the following synonymized species were additionally studied. *Clavilispinus rufescens* (LECONTE, 1863), *Clavilispinus laevigatus* (KRAATZ, 1859), *Clavilispinus fauvelii* (SHARP, 1876), *Clavilispinus aruensis* (FAUVEL, 1878). A detailed study came to the result, that *C. rufescens* is a distinct species, which is closely related to *C. minutus*.

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\* Dedicated to Prof. Dr. Wolfgang J. Junk on the occasion of his 60th anniversary.

Therefore, all species of the *C. exiguus* group are here described or redescribed including the species: *C. exiguus*, *C. minutus*, *C. politus*, *C. rufescens* and the three new species *C. junkii*, *C. cephalotes* and *C. distinguendus*. The last species, *C. mariannae*, which is also closely related to this species group, is sufficiently described and differentiated by the small size (IRMLER 2001). Furthermore, since the review of the Neotropical species of the genus *Clavilispinus* (IRMLER 1991) numerous collections were studied and a preliminary overview on the distribution of the species group can be given.

### Material and acknowledgments

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### Key to the species of the *Clavilispinus exiguus* group

1. Head with prominent anterior angles (Fig. 3), surface of pronotum and elytra without microsculpture, polished (Fig. 15G, H), antennae forming a distinct club (Fig. 10), small species of 2.0 mm . . . . . *C. cephalotes* n.sp.
- Anterior angles of head arcuate, surface of pronotum and elytra either polished or with microsculpture, last antennomeres wider than basal ones, but antennae not forming a distinct club . . . . . 2
2. Small species, 1.8 to 2.1 mm large . . . . . 3
- Larger species, longer than 2.3 mm . . . . . 5
3. Unicoloured, yellow . . . . . 4
- Bicoloured, head and elytra brown, pronotum yellow, surface with wide longitudinally reticulate microsculpture (Fig. 15C, D) . . . . . *C. junkii* n.sp.
4. Slightly larger, 1.9-2.1 mm long (Fig. 4), surface of pronotum and elytra with distinct longitudinally reticulate microsculpture, pronotum with fine and sparse punctuation (Fig. 15A, B) . . . . . *C. exiguus* (ERICHSON, 1840)
- Slightly smaller, 1.8-1.9 mm long (Fig. 2), surface of pronotum with reduced, but distinct microsculpture, elytra with very weak and indistinct longitudinally reticulate microsculpture (Fig. 15E, F) . . . . . *C. distinguendus* n.sp.
5. Surface of pronotum and elytra without microsculpture, polished (Fig. 15M, N), head, pronotum and abdomen yellow, elytra usually dark by the through shining hind wings, 2.3-2.5 mm long . . . . . *C. politus* (SHARP, 1887)
- Surface of pronotum and elytra with distinct longitudinally reticulate microsculpture, unicoloured yellow or light red . . . . . 6
6. Antennae longer, antennomeres 9 and 10 nearly quadrate (Fig. 14), microsculpture of elytra slightly deeper and more netlike reticulate (Fig. 15K, L), slightly longer (Fig. 16), 2.7 mm . . . . . *C. rufescens* (LECONTE, 1863)
- Antennae shorter, antennomeres 9 and 10 two times wider than long (Fig. 13), microsculpture of elytra weaker and more longitudinally reticulate (Fig. 15I, J), slightly smaller (Fig. 16), 2.4-2.5 mm . . . . . *C. minutus* (SHARP, 1887)

## Description of the species of the *exiguus*-group

### *Clavilispinus cephalotes* n.sp. (Figs. 3, 10, 15G & H, 17)

Holotype. - SURINAME: Marowijne, Perica, 70 km E Paramaribo, on East-West Road, 5 m elevation, 5°40'28"N, 54°36'31"W, 31 May-5 June 1999, leg. H. FALIN & B. DE DIJN, SURIF99034, from flight intercept trap (SEMC).

Diagnosis. - The species is very similar to *C. distinguendus* by to the shiny surface and the size, but microsculpture is still weaker and surface similarly polished as in *C. politus* (Fig. 15G, H). *C. politus*, however, is distinctly larger (Fig. 16). The species is mainly characterised by the prominent anterior angles of the head, which is unique in the *Clavilispinus* species described from the Neotropical fauna. Furthermore, the specific structure of the antennae, forming a distinct club is also a unique character (Fig. 10).

Description. - Length: 2.0 mm; Colour: unicoloured yellow; Head: 0.3 mm long, 0.35 mm wide; with fine and sparse punctuation, distance between punctures on average twice as wide as diameter of punctures, without microsculpture, surface polished and shiny; sides in front of eyes parallel, anterior edge smoothly emarginate, thus, anterior angles prominent and head more or less quadrate; mandibles distinctly prominent, eyes scarcely prominent, two supraocular setae (Fig. 3). Antennae: 1<sup>st</sup> and 2<sup>nd</sup> antennomere thick and quadrate, thicker than the followings, antennomeres 3 to 7 small and short; antennomeres 8 to 11 of increasing width forming a distinct club, 9<sup>th</sup> and 10<sup>th</sup> antennomere three times wider than long (Fig. 10). Pronotum: 0.35 mm long, 0.35 mm wide; punctuation similar as on the head, without microsculpture, surface polished, only small parts at anterior edge with traces of fine, longitudinally reticulate microsculpture (Fig. 15G), sides parallel, only the posterior 1/3 narrowed to posterior angles; posterior angles with indistinct depressions, sides with two long setae and few short ones. Elytra: 0.4 mm long, 0.35 mm wide; punctuation still finer and scarcer than on the pronotum (Fig. 15H), with very indistinct, longitudinally reticulate microsculpture in front of posterior edge, surface nearly polished and shiny, a longitudinal depression on each side of the suture.

Etymology. - The specific name refers to the remarkable structure of the head. It is derived from the Greek word *kephale* meaning head.

### *Clavilispinus distinguendus* n.sp. (Figs. 2, 9, 15E & F, 16, 17)

Holotype. - COSTA RICA: Puntarenas, Osa Peninsula, 7 km W. Rincon, Est. F.N. Aguas Buenas, 50 m, 21.-25. June 1997, 1 female from flight intercept trap, leg. S. & J. PECK, CRIP97 025 (SEMC).

Paratypes. - COSTA RICA: Puntarenas, Osa Peninsula, 7 km W. Rincon, Est. F.N. Aguas Buenas, 50 m, 21.-25. June 1997, 1 female from flight intercept trap, leg. S. & J. PECK, CRIP97 025 (UIC); PANAMA: Colon, Parque Nacional Soberania, Pipeline Road km 6.1, 9°07'N, 79°45'W, 40 m, 1 female, 7.-21. June 1995 from flight intercept trap, leg. J. ASHE, R. BROOKS, #265, (SEMC); Barro Colorado Island, 9°11'N, 79°51'W, 1 female, 15 July 1994 from flight intercept trap, leg. D. BANKS (SEMC).

Diagnosis. - The species strongly resembles *C. exiguus* with respect to the colour and the size (Fig. 16). Also the structure of the antennomeres are very similar in the two species, while antennae are more slender in *C. junkii* (Fig. 8). However, microsculpture on pronotum is reduced to several longitudinal strigae, punctuation slightly deeper and denser, while microsculpture of the elytra is much weaker in *C. distinguendus* than in *C. exiguus* and *C. junkii* (Fig. 15E, F). Thus, surface of *C. distinguendus* is shiny, while it is dull in *C. exiguus*. In particular, microsculpture of the front head is netlike reticulate in *C. exiguus*, while it is nearly lacking in *C. distinguendus*.

Description. - Length: 1.9 mm. Colour: unicoloured yellow, also legs and antennae yellow. Head: 0.25 mm long, 0.30 mm wide; eyes scarcely prominent and anterior part in front of eyes parallel, not directly narrowed to the anterior edge; with very weak and sparse punctuation, distance between punctures at least five times as wide as the diameter of punctures; disk with very weak, scarcely visible, longitudinally reticulate microsculpture; surface shiny; clypeus with weak transversely reticulate microsculpture; temples with deeper netlike reticulate microsculpture; with two supraocular setae, two setae between the anterior edge of eyes and two setae along the anterior margin (Fig. 2). Antennae: short and thick; 2<sup>nd</sup> antennomere

globular, 3<sup>rd</sup> conical, 1.3 times longer than 2<sup>nd</sup>; the following antennomeres of increasing width, 4<sup>th</sup> more or less quadrate, 8<sup>th</sup> about three times wider than long; the following two antennomeres thicker, two times wider than long (Fig. 9). Pronotum: 0.27 mm long, 0.32 mm wide; sparsely and weakly punctuate, but punctures deeper and larger than on the head; with weak longitudinally reticulate microsculpture (Fig. 15E); surface shiny; with small areas polished and with an indistinct short midline developed only in the posterior part; sides in the anterior half parallel, emarginate in the posterior half; with distinct depression at the posterior angles; depressions with a more distinct microsculpture than on the disk; one long dark seta at the beginning of the posterior emargination, one at the parallel part and one at the anterior angles. Elytra: 0.37 mm long, 0.35 mm wide; with weaker and sparser punctuation than on the pronotum, but with more distinct microsculpture, which is longitudinally reticulate (Fig. 15F); surface less shiny than surface of pronotum; the central point with seta very fine; with indistinctly longitudinal depression along the suture. Abdomen: without punctuation, but with distinct rhomboid microsculpture, surface scarcely shiny; with long dark setae at the posterior edge, which are longer than half the length of an abdominal segment.

**Etmology.** - The specific name *distinguendus* is derived from the same Latin word meaning a thing to be distinguished from an other and refers to the strong resemblance of *C. distinguendus* to *C. exiguus*.

### ***Clavilispinus exiguus* (ERICHSON, 1840: 830) (Figs. 4, 11, 15A & B, 17)**

*Lispinus exiguus* ERICHSON, 1840: 830 (type specimen seen); *Ancaeus aruensis* FAUVEL, 1878: 200 (type specimen seen); *Lispinus laevigatus* KRAATZ, 1859: 188 (type specimen seen); *Ancaeus obscuripennis* BERNHAUER, 1926: 255 (type specimen seen); *Lispinodes pallescens* BLACKBURN, 1885: 126; *Holotrochus fauveli* SHARP, 1876: 387 (type specimen seen).

**Material.** - MEXICO: Tapilula, 10.05.69, leg. D.E. BRIGHT (CNC); Palenque, 22.06.69, 09.05.69, leg. D.E. BRIGHT (CNC); Frontera, 23.06.69, leg. D.E. BRIGHT (CNC); El Naranjo, 05.07.90, leg. J.S. ASHE (SEMC); BELIZE: Belmopan, 05.05.96, leg. C.E. CARLTON (SEMC); Orange Walk District, 25.05.1997, leg. C. CARLTON (KHNH, UIC); HONDURAS: Olanchito, 16.04.49, leg. E.C. BECKER (CNC); COSTA RICA: Limon, leg. A. BIERIG (FMNH); Puntarenas, 01.06.93, leg. MICHALSKI (SEMC); 01.02.92, leg. P. HANSON (SEMC); Puerto Viejo, 01.09.92, 01.10.92, 01.11.92, 01.12.92, leg. P. HANSON (SEMC, UIC); 08.08.92, leg. G. WRIGHT (SEMC); Heredia, 24.07.92, leg. G. WRIGHT (SEMC); Cartago, 01.10.93, leg. P. HANSON (SEMC); Alajuela, 19.05.89, leg. J.S. ASHE (SEMC); Guanacaste, 03.05.95, R. ANDERSON (SEMC); PANAMA: Panama City, 19.11.94, leg. D. WINDSOR (SEMC); Canal Zone, 19.06.76, leg. A. NEWTON (FMNH); Barro Colorado, 06.08.94, leg. D. BANKS (SEMC); Darién, 07.06.96, leg. J.S. ASHE (SEMC); CUBA: Havana (NMNH); leg. RAMBOUSEK, without data (BMNH); DOMINICAN REPUBLIC: Jarabacoa, leg. R. BLACKWELDER (MCZ); PUERTO RICO: without data (MNB); GUADELOUPE: Trois Rivières, leg. DUFAU (IRSN); SAINT LUCIA: leg. R. BLACKWELDER (NMNH); SAINT CROIX: leg. R. BLACKWELDER (NMNH); GRENADA: leg. R. BLACKWELDER (BMNH); COLUMBIA: without further data (MNB); Santa Marta, leg. E. BUGNION (IRSN); ECUADOR: Sucumbios, 24.03.99, leg. R.W. BROOKS (SEMC); PERU: Panguana, 22.09.75, 31.08.75, leg. W. HANAGARTH (UIC), 31.07.83, 23.06.84, 31.03.85, 03.01.85, leg. M. VERHAAG (UIC); Pucallpa, 2.7.1988, leg. A.A. ZAKHAROV (RC); without data (MNB); Teniente, 22.07.93, 20.07.93, leg. R. LESCHEN (SEMC); Puerto Maldonado, 02.07.89, 20.06.89, 17.05.97, leg. R. LESCHEN (SEMC); Cuzco, 16.10.00, 19.10.00, 21.10.00, 24.10.00, leg. R.W. BROOKS (SEMC, UIC); BOLIVIA: Yuracaris (FMNH); VENEZUELA: Rancho Grande, 04.07.94, leg. T. PHILIPS (SEMC); 06.03.95, leg. R.W. BROOKS (SEMC); SURINAME: Perica, 5.6.1999, leg. Z.H. FALIN (SEMC); Zanderij Airport, 20.6.199, leg. Z.H. FALIN (SEMC, UIC); FRENCH GUYANA: Matoury, 29.05.97, leg. J.S. ASHE (SEMC, UIC); BRAZIL: Nova Teutonia, 01.03.50, leg. F. PLAUMANN (FMNH); Rio Caragat, 3.1953, leg. F. PLAUMANN (DEI); São Theodoro (FMNH); São Paulo (FMNH); Itabuna, 26.08.70, leg. WINDER; Brasília, 24.02.70, leg. J.M. CAMPBELL (CNC); Belem, 30.03.70, leg. J.M. CAMPBELL (CNC); Itapiranga, 10.11.69, leg. J.M. CAMPBELL (CNC); Rio de Janeiro, 16.12.61, leg. H. SCHUBART (UIC); Manaus, 03.09.72, leg. U. IRMLER (UIC); Amazon without further data (BMNH); PARAGUAY: without data (DEI).

**Diagnosis.** - The species is similar in size as *C. junkii*, *C. distinguendus* and *C. cephalotes* (Fig. 16). It most strongly resembles *C. distinguendus*, which has, however, a much weaker microsculpture on the

elytra and a dense punctuation on the pronotum. Microsculpture of the pronotum in *C. exiguus* is distinctly longitudinally reticulate (Fig. 15A), while it is reduced to several strigae in *C. distinguendus* (Fig. 15E).

Description. - Length: 1.9-2.1 mm. Colour: unicoloured yellow. Head: 0.24-0.25 mm long, 0.32-0.35 mm wide; without punctuation, laterally and anteriorly with distinct netlike reticulate microsculpture, on the disk with dense longitudinally reticulate microsculpture, surface scarcely shiny, anterior edge on each side of the middle with two setae and two supraocular setae. Antennae: 2<sup>nd</sup> and 3<sup>rd</sup> antennomere of same length, more or less as wide as long, the following two antennomeres smaller, antennomeres 6 to 11 of increasing width, 9<sup>th</sup> and 10<sup>th</sup> antennomere nearly twice as wide as long (Fig. 11). Pronotum: 0.28-0.33 mm long, 0.33-0.38 mm wide; with very weak and sparse punctuation, distance between puncture more than twice as wide than diameter of punctures, microsculpture dense and distinct, longitudinally reticulate (Fig. 15A), surface scarcely shiny, sides smoothly arcuate in the anterior half, distinctly emarginate to the posterior angles, widest slightly behind the anterior angles; posterior angles with indistinct depression, anterior and lateral edge with several setae. Elytra: 0.38-0.45 mm long, 0.38-0.43 mm wide; punctuation similar as on the pronotum, with several punctures deeper and larger, microsculpture dense and distinct, longitudinally reticulate, partly also netlike reticulate (Fig. 15B), surface scarcely shiny, lateral edge with several setae and a central seta in the centre of the disk. Abdomen: with less distinct netlike reticulate microsculpture than on the elytra and the pronotum, thus, surface more shiny, each abdominal segment laterally and posteriorly with several dark long setae.

***Clavispinus junkii* n.sp. (Figs. 1, 8, 15C & D, 16, 17)**

Holotype. - COSTA RICA: Heredia, La Selva Biol. Station, 3 km S. Puerto Viejo, 10°26'N, 84°01'W, 3.-8. Aug. 1992, 1 female, leg. G. WRIGHT, Malaise trap, second growth, SOC 1000 (SEMC).

Paratypes. - BELIZE: Orange Walk Distr., Rio Bravo Conservation Area (trail to well), 25. April to 5. May 1996, 17°50'38"N, 89°01'04"W, leg. C. CARLTON, #107, flight intercept trap (SEMC); COSTA RICA: Heredia, La Selva Biol. Station, 3 km S. Puerto Viejo, 10°26'N, 84°01'W, 3.-8. Aug. 1992, leg. G. WRIGHT, Malaise trap, second growth, SOC 1000 (SEMC); Heredia, 3 km S. Puerto Viejo, OTS-La Selva, 100 m, 4 females, October 1992, leg. P. HANSON (SEMC, UIC); Puntarenas, R.F., Golfo Dulce, 24 km W Piedras Blancas, 200 m, December 1990, 1 female, leg. P. HANSON (SEMC); Puntarenas, Osa Peninsula, Fundación Neotropical, 10 km W. Rincon, 20 m, 8°42'30"N, 83°31'30"W, 22 June 1997, 1 female, leg. R. ANDERSON, CRIA97 027A, from berlese forest litter (SEMC, UIC); PERU: Madre de Dios, Cocha Cashu Biol. Station, Manu National Park, 350 m, 11°53'45"S, 71°24'24"W, 17.-19. October 2000, 1 female, leg. R. BROOKS, PERUIB00 042, from flight intercept trap (SEMC); Huanuco, Panguana, 74°56'W, 9°37'S, leaf litter, 23.5.1976, 1 female, leg. W. HANAGARTH (UIC); (UIC); BRAZIL: Amazonas, Manaus, Rio Tarumã Mirim, pitfall trap, 1.12.1971, 2 females, leg. U. IRMLER (UIC).

Diagnosis. - The species resembles *C. exiguus* with regard to the form of the pronotum, which is emarginate in front of the posterior angles, the microsculpture of head, pronotum and elytra (Fig. 15C, D) and the size (Fig. 16). It can be easily distinguished from that species by the colour, which is unicoloured yellow in *C. exiguus*, but bicoloured with brown head and elytra and with yellow pronotum in *C. junkii*. Microsculpture on pronotum and elytra is less deep and meshes are slightly wider in *C. junkii* than in *C. exiguus* and the surface of *C. junkii* is more shiny.

Description. - Length: 1.8 mm. Colour: Head piceous, pronotum yellow, elytra dark brown, abdomen red, apical three segments light red, 5<sup>th</sup> tergite distinctly darker than proceedings, last tergite lighter red, legs and antennae yellow. Head: 0.25 mm long, 0.30 mm wide; with very sparse and fine punctures, distance between punctures more or less three to five times wider than diameter of punctures; microsculpture distinct, but not deep, surface, therefore, shiny, with scattered areas without microsculpture, microsculpture on the disk longitudinally reticulate, adjacent to the eyes more netlike reticulate; eyes prominent; on each side with two supraocular setae, two setae on a line between the anterior edge of eyes and two setae at the apical margin. Antennae: 2<sup>nd</sup> antennomere globular, 3<sup>rd</sup> conical, 4<sup>th</sup> small, as wide as the 3<sup>rd</sup>, but only half of its length, the following antennomeres of increasing width, 9<sup>th</sup> antennomere about two times wider than long; 3<sup>rd</sup> to 10<sup>th</sup> antennomere with a crown of apical setae (Fig. 8). Pronotum: 0.27 mm long, 0.35 mm wide; slightly dorsoventrally depressed; with sparse and fine punctuation (Fig. 15C),



which is slightly denser than on the head and, therefore, surface slightly less shiny; with indistinct midline, which is depressed in the posterior half, midline not touching the anterior or the posterior edge; a distinct depression at the posterior angles and a flat depression in the posterior part of the disk; sides smoothly arcuate in the anterior part, emarginate in the posterior third; with few setae along the lateral margin. Elytra: 0.40 mm long, 0.37 mm wide; without punctuation, but with similar microsculpture than on the pronotum (Fig. 15D); surface slightly shiny; an indistinct depression near the suture in the anterior third; a large puncture with seta on each side near the posterior edge of the depression. Abdomen: Without punctuation, but with netlike microsculpture, surface shiny; each tergite with a transverse row of long setae at the posterior edge.

Etymology. - The species is dedicated to my old friend Prof. Dr. Wolfgang JUNK in reminder of our co-operation in the Max-Planck-Institute, Plön and at the Amazon.

***Clavilispinus minutus* (SHARP, 1887: 717) (Figs. 5, 13, 15I & J, 16, 17)**

*Ancaeus minutus* SHARP, 1887: 717

Material. - BELIZE: Orange Walk District, 25.04.1995, leg. C.E. CARLTON (SEMC, UIC); GUATEMALA: Panzos, without further data, leg. CHAMPION (BMNH); COSTA RICA: 18.05.1934, leg. H. SCHMIDT (BMNH); Heredia, 19.05.1993, leg. J.S. ASHE (SEMC); PERU: Ucayali, Puente Chino, 14.10.1999, leg. R. BROOKS (SEMC); Pasco, Villa Rica, 18.10.1999, leg. R. BROOKS (SEMC); VENEZUELA: Maracay, 14.05.1998, leg. R. ANDERSON (SEMC, UIC); BRAZIL: Manaus, 05.11.1969, leg. J.M. CAMPBELL (CNC); Belem, 27.11.1969, leg. J.M. CAMPBELL (CNC); Rio Azul, 10.1959, leg. F. PLAUMANN (CNC).

Diagnosis. - The species is very similar to *C. exiguus* and *C. rufescens* due to the scarcely shiny surface, which is a consequence of the distinct and dense longitudinally reticulate microsculpture of pronotum and elytra (Fig. 15I, J). It can be distinguished from *C. exiguus* by the larger size (Fig. 16). The straightly narrowed sides of pronotum (Fig. 5), which was mentioned in IRMLER (1991), is variable and not of diagnostic value. Punctuation and microsculpture of the pronotum are more distinct than in *C. exiguus*. Compared to *C. rufescens* the structure of the antennae is most suitable to differentiate the two species. Antennae in *C. minutus* are much shorter with antennomeres 8 to 10 nearly three times wider than long (Fig. 13). Furthermore, *C. rufescens* is slightly larger than *C. minutus* and microsculpture of the elytra is partly more netlike reticulate (Fig. 15K, L).

Description. - Length: 2.4-2.5 mm. Colour: unicoloured light piceous. Head: 0.33-0.37 mm long, 0.38-0.45 mm wide; without punctuation, laterally and anteriorly with distinct netlike reticulate microsculpture, on the disk with longitudinally reticulate microsculpture, surface scarcely shiny, on each side with two setae at anterior edge and two supraocular setae, central part of the disc slightly elevated. Antennae: relatively short and thick, 3<sup>rd</sup> antennomere as wide as 2<sup>nd</sup> and not longer than wide, the following antennomeres distinctly wider than long, 9<sup>th</sup> and 10<sup>th</sup> antennomere three times wider than long (Fig. 13). Pronotum: 0.35-0.43 mm long, 0.40-0.48 mm wide; with fine and sparse punctuation, distance between punctures on average twice as wide than diameter of punctures, with distinct longitudinally reticulate microsculpture (Fig. 15I), surface scarcely shiny, with fine midline in the posterior half, sides more or less straightly narrowed from anterior to posterior angles, with scarcely pronounced emargination in the posterior third, depressions at the posterior angles distinct, several setae along the anterior and lateral edge. Elytra: 0.50-0.55 mm long, 0.43-0.50 mm wide; only with very few scattered punctures, on most parts without punctuation, with distinct longitudinally reticulate microsculpture (Fig. 15J), surface scarcely shiny, with several setae along the lateral edge and one centrally on the disk.

***Clavilispinus politus* (SHARP, 1887: 718) (Figs. 7, 12, 15M & N, 16, 17)**

*Ancaeus politus* SHARP, 1887: 718, *Paralispinus rulomus* BLACKWELDER, 1943: 160

Material. - MEXICO: Balzapote, 07.07.76, leg. A. NEWTON (FMNH); GUATEMALA: El Tumbador, without further data (BMNH); BELIZE: Orange Walk District, 25.07.96, leg. C.E. CARLTON (SEMC); HONDURAS: Santa Barbara, 21.04.94, leg. R.W. BROOKS (SEMC); 22.06.94, leg. J.S. ASHE (SEMC); COSTA RICA: Hamburg Farm, leg. A. BIERIG (FMNH); Heredia, 19.05.93, leg. J.S. ASHE (SEMC);

Guanacaste, 22.05.93, 15.07.00, leg. J.S. ASHE (SEMC); Puerto Viejo, 01.10.92, 01.01.93, leg. P. HANSON (SEMC, UIC); 03.08.92, leg. G. WRIGHT (SEMC); 03.02.91, leg. J.S. NOYE (SEMC); Alajuela, 19.05.89, leg. J.S. ASHE (SEMC); Rincon, 25.06.97, leg. J. PECK (SEMC, UIC); PANAMA: Barro Colorado, 25.10.75, leg. P.J. CHANDLER (FMNH); 22.07.94, leg. D. BANKS (SEMC); Canal Zone, 19.06.76, leg. A. NEWTON (FMNH); Bocas del Toro, leg. H.S. DYBAS (FMNH); Cerro Campana, 02.08.70, leg. J.M. CAMPBELL (CNC); Colon, 21.06.95, leg. J.S. ASHE (SEMC); Darién, 07.06.96, leg. J.S. ASHE (SEMC); San Blas, 28.05.95, leg. J.S. ASHE (SEMC); El Copé, 07.06.95, leg. J.S. ASHE (SEMC); CUBA: Yara; Jamaica: Kingston, 04.02.37, leg. R. BLACKWELDER (NMNH); Saint Ann's Bay, leg. R. BLACKWELDER (NMNH); Falmouth, 06.02.37, leg. R. BLACKWELDER (NMNH); GUADELOUPE: Trois Rivières, leg. DUFAU (NHMB); Saint Lucia: leg. R. BLACKWELDER (NMNH); Saint Vincent: leg. R. BLACKWELDER (NMNH); COLUMBIA: Anchicaya, 22.07.70, leg. J.M. CAMPBELL (CNC); Aguacalera, 25.07.70, leg. J.M. CAMPBELL (CNC); ECUADOR: Santo Domingo de los Colorados, 22.02.76, leg. A. HOWDEN (CNC); Sucumbios, 14.03.94, leg. P. HIBBS (SEMC, UIC); 03.06.94, 13.07.94, 25.07.94, 24.03.99, leg. R.W. BROOKS (SEMC); Puerto Napo, 18.07.94, leg. F. GENIER (SEMC); Esmeraldas, 19.07.96, leg. P. HIBBS (SEMC); PERU: Panguana, 16.05.76, 01.09.75, leg. W. HANAGARTH (UIC); Iquitos, 01.05.92, leg. J. DANOFF-BURG (SEMC); Loreto, San Jacinto, 7.7.93, leg. R. LESCHEN (UIC); BOLIVIA: Cochabamba, 09.02.99, leg. F. GENIER (SEMC, UIC); 09.02.99, leg. R. HANLEY (SEMC); Cuzco, 16.10.00, 21.10.00, 26.10.00, leg. R.W. BROOKS (SEMC); San Ramon, 07.07.00, leg. J.S. ASHE (SEMC); SURINAME: Marowijne, 02.07.99, leg. Z.H. FALIN (SEMC); FRENCH GUYANA: Saül, 31.05.97, leg. J.S. ASHE (SEMC, UIC); Roura, 29.05.97, leg. J.S. ASHE (SEMC); Matoury, 29.05.97, leg. J.S. ASHE (SEMC); Cayenne, 09.07.97, leg. J.S. ASHE (SEMC); Loreto 07.07.93, leg. R. LESCHEN (SEMC); Teniente, 22.07.93, leg. R. LESCHEN (SEMC); BRAZIL: Belem, 30.03.70, leg. J.M. CAMPBELL (CNC); Itapiranga, 10.11.69, leg. J.M. CAMPBELL (CNC); Manaus, 01.12.71, leg. U. IRMLER (UIC);

Diagnosis. - *C. politus* is as large as *C. minutus* (Fig. 16), but without distinct microsculpture and, thus, polished and surface shiny (Fig. 15M, N). In this respect it is similar to *C. cephalotes*, which is however much smaller. Usually *C. politus* is easily to distinguish from the other species of the group by the shiny surface and the dark elytra (Fig. 7). The dark colour depends on the posterior wings shining through the elytra.

Description. - Length: 2.3-2.5 mm; Colour: yellow, elytra indistinctly dark depending on the posterior wings shining through the elytra. Head: 0.30-0.32 mm long, 0.39-0.42 mm wide; with fine and sparse punctuation, distance between punctures on average twice as wide as diameter of punctures, with very few short and fine longitudinal strigae, surface shiny, anterior part of the disc and in front of the neck without punctuation and polished and microsculpture, surface polished, on each side two setae at anterior edge and two supraocular setae. Antennae: relatively short and stout, 3<sup>rd</sup> antennomere not longer than 2<sup>nd</sup>, the following wider than long, antennomeres 9 and 10 nearly three times wider than long (Fig. 12). Pronotum: 0.35-0.43 mm long, 0.40-0.48 mm wide; with fine, but relatively dense punctuation, a small midline without punctuation, without microsculpture (Fig. 15M), surface polished and shiny, widest shortly behind the anterior angles, sides more or less parallel in anterior half, emarginate in front of posterior angles, with distinct depressions at posterior angles, at anterior and lateral edge with several long setae. Elytra: 0.45-0.58 mm long, 0.41-0.51 mm wide; very finely and sparsely punctuate, on average distance between punctures twice to three times as wide as diameter, with sparse microsculpture existing in reduced longitudinal strigae (Fig. 15N), centrally on the disk a long seta on each side, several more setae along the lateral edge.

### ***Clavilispinus rufescens* (LECONTE, 1863: 59) (Figs. 6, 14, 15K & L, 16)**

*Lispinus rufescens* LECONTE, 1863: 59 (Two type specimens examined with location New Orleans in MCZ)

Diagnosis. - The species resembles *C. minutus* in size, punctuation and microsculpture. It is distinctly larger than *C. exiguus* (Fig. 16) and microsculpture is much more distinct. It can be distinguished from *C. minutus* by the longer antennae (Fig. 14). Antennae in *C. minutus* are only scarcely longer than the head,

while they are as long as the head and 2/3 of pronotum in *C. rufescens*. Compared to the related species, *C. rufescens* is the largest one (Fig. 16). Microsculpture of pronotum and elytra is very similar to *C. minutus*, but slightly denser and more netlike (Fig. 15K, L).

Description. - Length: 2.7 mm. Colour: Totally red. Head: 0.35 mm long, 0.45 mm wide; very finely punctuate, distance between punctures distinctly wider than diameter of punctures, behind the eyes on the disc slightly more densely punctuate; microsculpture dense and distinct, on the clypeus more transversely reticulate, on the disc more netlike reticulate, surface dull, surface of clypeus slightly more shiny; two pairs of indistinct depressions on the disc; one pair of larger oval depressions between the base of antennae, a second pair of circular, smaller depressions on the disc behind the eyes. Antennae: relatively long, as long as head and 2/3 of pronotum; 3<sup>rd</sup> antennomere not longer than 2<sup>nd</sup>; the following antennomeres scarcely wider than long, in particular, antennomeres 8 to 10 large and nearly quadrate (Fig. 14). Pronotum: 0.42 mm long, 0.50 mm wide; punctuation more distinct than on the head, in particular adjacent to the depressed midline, distance between punctures slightly wider or as wide as diameter of punctures; microsculpture distinct and dense, on the disc partly longitudinally reticulate (Fig. 15K), at the sides and near the anterior and posterior edge more netlike reticulate, surface dull; sides in the anterior half more or less parallel, slightly emarginate in front of posterior angles; posterior angles with distinct longitudinal depressions; several setae along lateral and anterior margin. Elytra: 0.60 mm long, 0.52 mm wide; very finely and sparsely punctuate; punctures scarcely visible between the distinct microsculpture, distance between punctures at least four to five times wider than diameter of punctures; a larger puncture with seta in the centre of the disc; microsculpture less distinct than on the pronotum, partly longitudinally reticulate, partly netlike reticulate (Fig. 15L), surface slightly more shiny than on the pronotum.

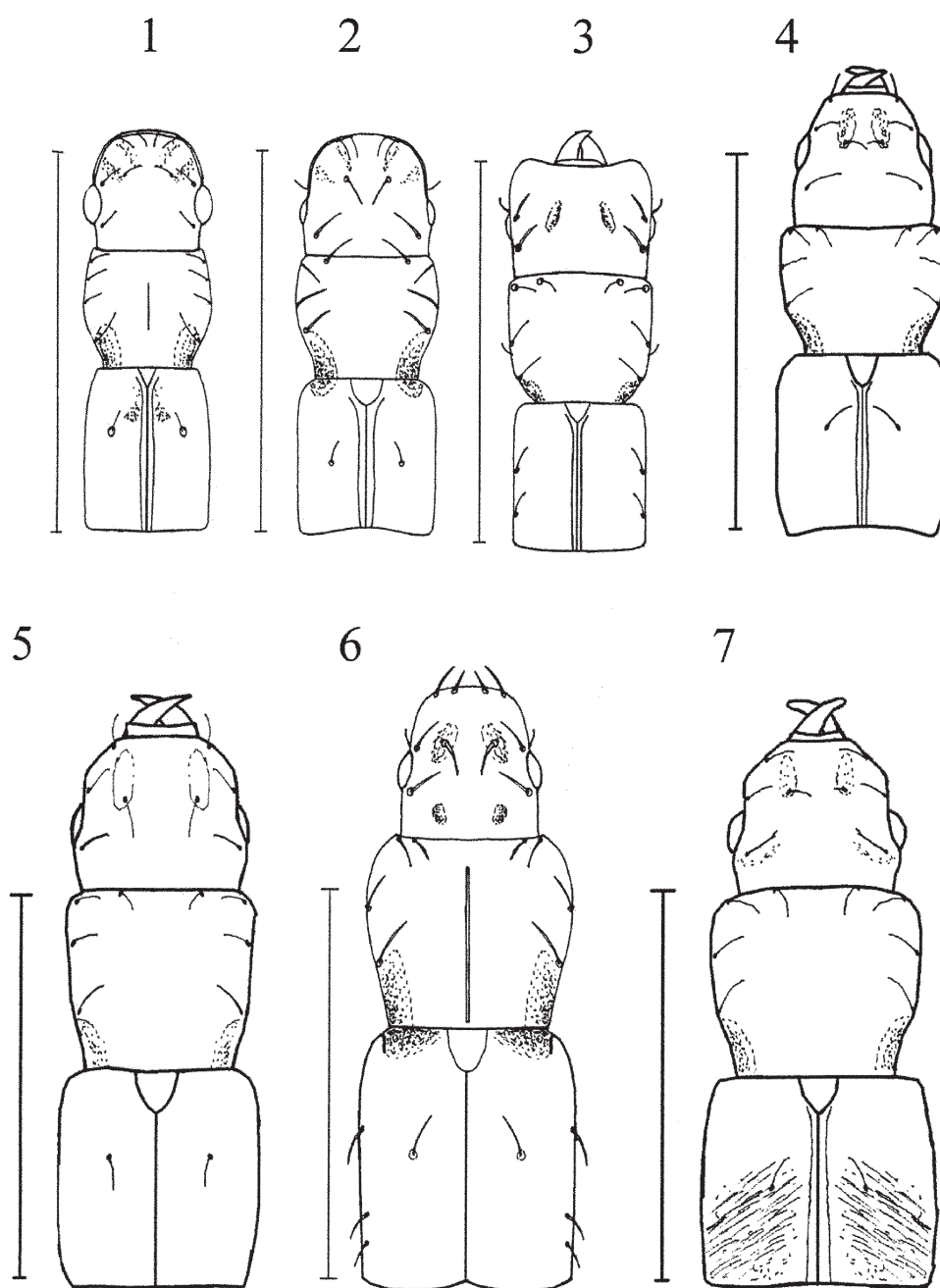
#### Remarks to distribution

*C. exiguus* is found within the whole tropical and subtropical Neotropics (Fig. 17). The distribution reflects more or less of the potential area of the wet and dry tropical forests from Mexico to southern Brazil. Moreover it is pantropically distributed, but not in southern USA. It is the most frequent and wide spread species of the group in Central and South America. *C. politus* was also frequently found, but in Brazil locations were only along the Amazon valley, although many samples were available from eastern and southern Brazil. It seems, that the species is only distributed from southern Mexico within the recent wet tropical forests to northern South America and the eastern slope of the Andean mountains. The distribution more or less reflects the recent distribution of the lowland wet rain forest. The two species *C. minutus* and *C. junkii* are rarer. Thus, the distribution is still not clear. *C. minutus* is distributed from Guatemala to southern Brazil and thus resembles the distribution of *C. exiguus*, while distribution of *C. junkii* seems to be similar to that of *C. politus*.

#### References

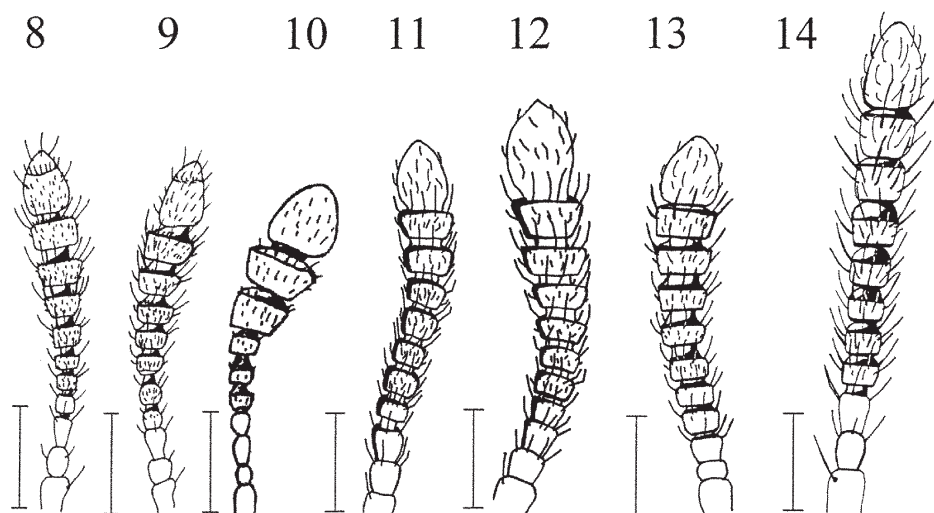
- IRMLER, U. (1991): Neue Arten der Gattung *Clavilispinus* BLACKWELDER (Col., Staphylinidae) aus der Neotropis. - Entomologische Blätter **87**: 85-91.
- IRMLER, U. (2001): New Neotropical species of the genera *Clavilispinus*, *Aneucamptus*, *Thoracophorus* and *Holotrochus* (Coleoptera: Staphylinidae, Osoriinae). - Amazoniana **16**: 349-361.





Figs. 1-7:

1: *Clavilispinus junkii*, 2: *C. distinguendus*, 3: *C. cephalotes*, 4: *C. exiguus*, 5: *C. minutus*, 6: *C. rufescens*, 7: *C. politus*.



Figs. 8-14:

Antennae of 8: *C. junkii*, 9: *C. distinguendus*, 10: *C. cephalotes*, 11: *C. exiguus*, 12: *C. politus*,  
13: *C. minutus*, 14: *C. rufescens*.

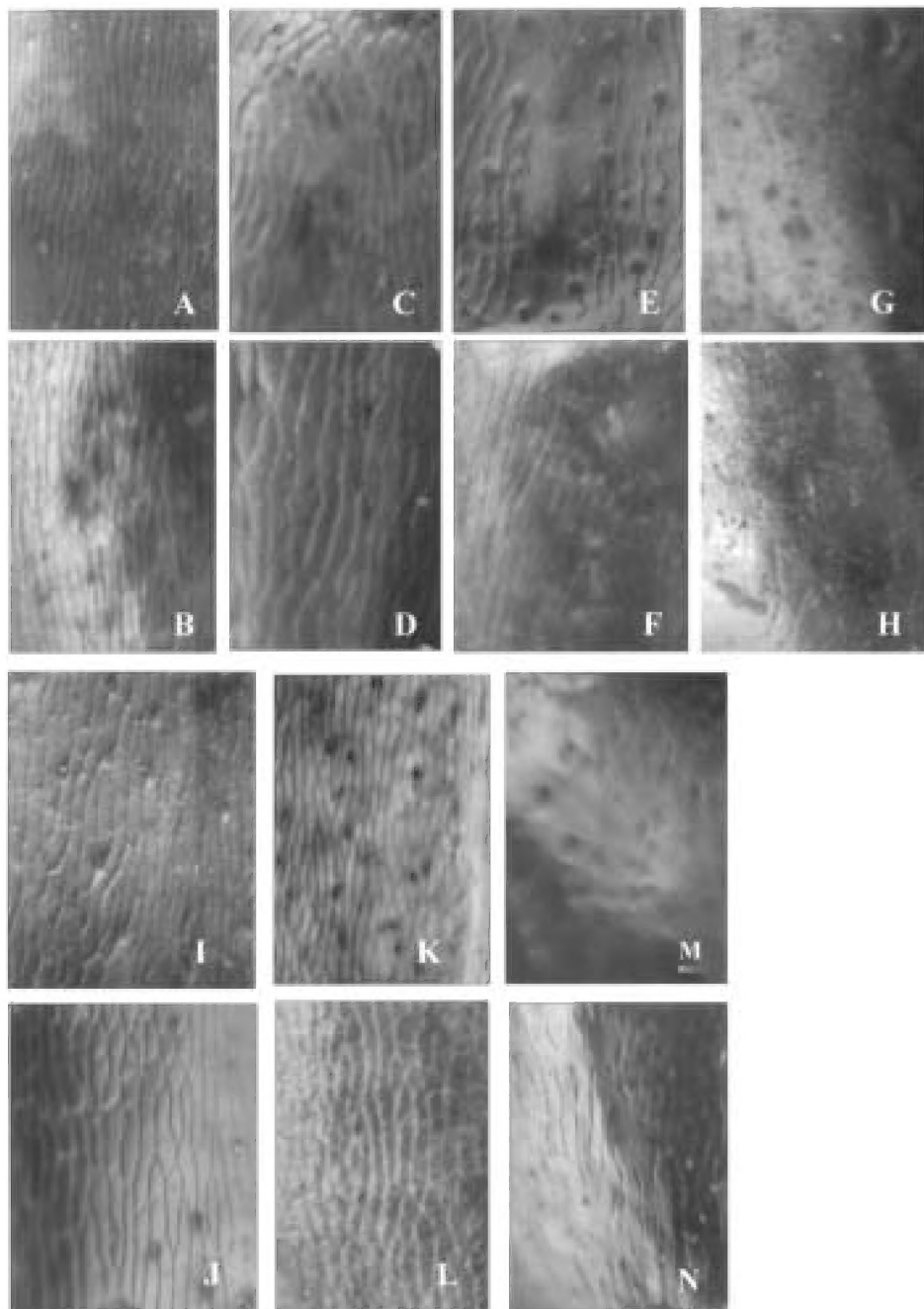


Fig. 15:

Surface; A: pronotum, B: elytra of *C. exiguus*; C: pronotum, D: elytra of *C. junkii*; E: pronotum, F: elytra of *C. distinguendus*; G: pronotum, H: elytra of *C. cephalotes*; I: pronotum, J: elytra of *C. minutus*; K: pronotum, L: elytra of *C. rufescens*; M: pronotum, N: elytra of *C. politus*.

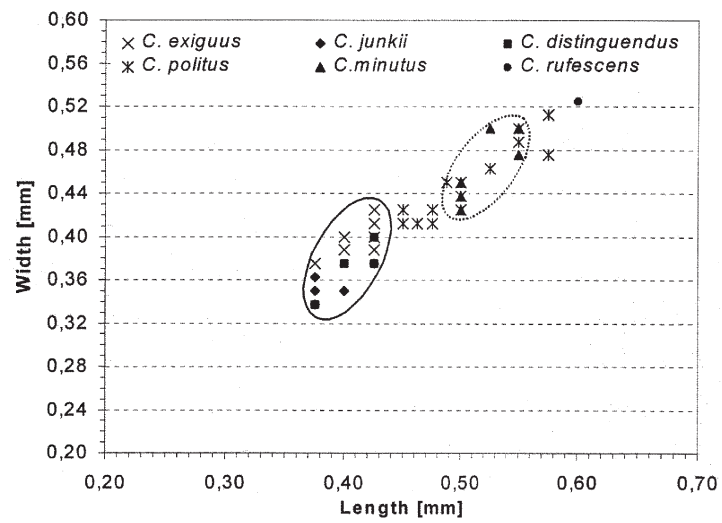


Fig. 16:  
Elytral size of the six species of the *C. exiguus* group. The solid circular includes the species *C. exiguus*, *C. junkii* and *C. distinguendus*, the dotted circular the species *C. minutus*.

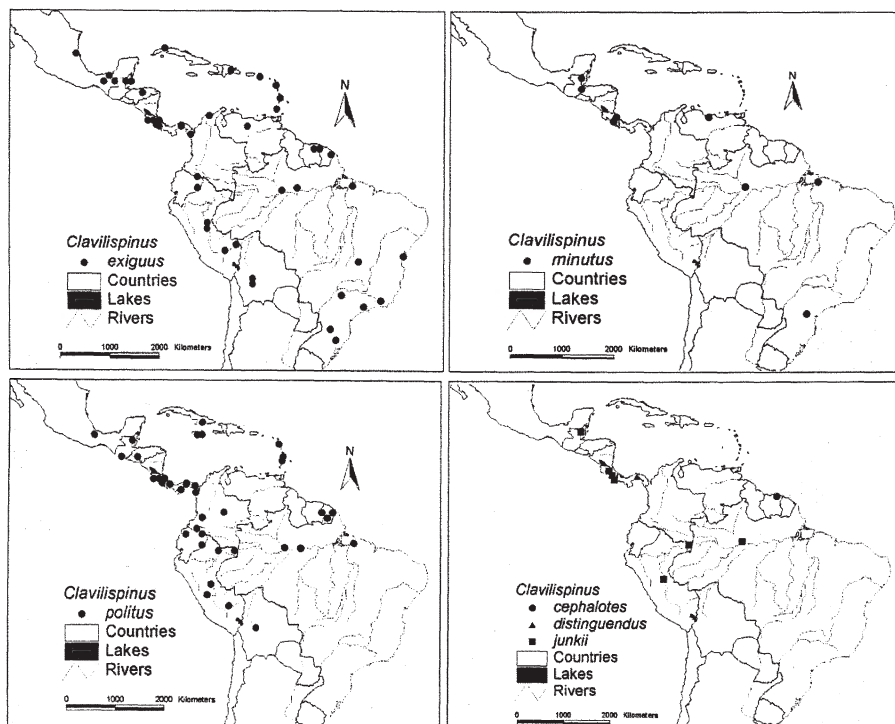


Fig. 17:  
Maps with distribution of *C. exiguus*, *C. minutus*, *C. politus*, *C. junkii* and *C. distinguendus* and *C. cephalotes* in the Neotropical region.